

17.0 Non-technical Abstract

Many types of cancer cannot be cured by traditional medical treatments, including drugs, surgery, or radiation. In this study, an experimental treatment will be offered that may help to fight this disease. We will attempt to induce tumor regression by the introduction of genetic material that directs the synthesis of a protein which stimulates the immune system. The genetic material, DNA, will be introduced directly into the tumor by mixing it with fat bodies, or liposomes, and this mixture will be injected into the tumor. The DNA will be taken into cells and cause them to produce a protein that stimulates tissue rejection. This protein, called HLA-B7, causes cells which contain it to be recognized as foreign by the immune system. The goal of the treatment is to stimulate the immune system to attack and kill the tumor. In this study, we will determine a safe and effective dose to administer the DNA/liposome complex. Increasing amounts of this complex will be used in different patient populations. If no side effects are observed, repeated treatments will be instituted. The expression and nature of the immune response will also be characterized. This treatment may provide a therapeutic effect in cancer and could be applied to the treatment of other diseases.